

this variation, although it is fairly safe to assume it is not wholly environmental in origin. *D. Lemmoni* occurs at very high altitudes and the populations are often separated by considerable distance. The semi-isolation resulting from this physical separation is probably a major factor in producing the local variants found in the species, but the plants of the Sweetwater Mountains alone show a range of variation that is nearly equal to that of the rest of the species put together. *D. Lemmoni* as a whole deserves further study when additional material can be obtained.—REED C. ROLLINS.

ASTER SHORTII SSP. AZUREUS (LINDL.), STAT. NOV.—Based upon *Aster azureus* Lindl., Hook., Comp. Bot. Mag. 1:98. 1835. The midwestern species *A. shortii* Lindl. and *A. azureus* Lindl. were artificially hybridized during the course of an investigation of the heterophyllous asters.¹ The results of these crossings showed that these two species behaved differently from the rest of the group with regard to ease of crossability and gene exchange. The information suggested that the two taxa had not sufficiently diverged genetically to be maintained as distinct taxonomic species.

The relegation of *A. azureus* to subspecific rather than varietal rank was based upon its geographical distribution in relation to that of *A. shortii*. These subspecies are allopatric in most of their range but do occur together in a triangular area from northern Ohio to southeastern Minnesota, eastern Iowa, and southern Illinois. *Aster shortii* ssp. *shortii* is found mostly east of the Mississippi River from southern Wisconsin to Georgia and Alabama while *A. shortii* ssp. *azureus* occurs in the states bordering the Great Lakes and south to Louisiana and eastern Texas.

Hence, despite morphological and ecological differentiation of *A. shortii* and *A. azureus*, the lack of genetic barriers to hybridization is, in the writer's judgment, sufficient basis for nomenclatorial revision.—CHARLOTTE J. AVERS, INDIANA UNIVERSITY, BLOOMINGTON, INDIANA.

¹ Avers, Charlotte J., Biosystematic studies in *Aster*. I. Crossing relationships in the Heterophylli. In ms. (1953).